

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-694 REV. B

REF CANADIAN STC: SH05-10

REF FAA STC: SR02086NY

REF EASA STC: EASA.IM.R.S.01085

It is acceptable to substitute the existing windows (P/N's D3136-041, D3117-1-0980 and D3117-3-0980) on D412-694-01-02 Door Assembly with DSI 9462-011 Window Substitution Kit. The DSI 9462-011 Kit is defined under Section 2.0 of these instructions. A single kit is required per window.

1.0 INSTALLATION PROCEDURE

1.1 INSTALLATION OF FRAME

Refering to Detail A, install the D3224-3 Frame as follows:

- 1.1.1 Remove existing window per Section 52.4 of ICA-D412-694.
- 1.1.2 Locate/center D3224-3 Frame into door inside window frame and transfer drill pilot holes ($\varnothing 0.098"$) from frame to door. If required, trim frame to eliminate any interference. Ensure distance from center of pilot holes to edge of composite door is a minimum of 0.400".
- NOTE:** Opening for window is not perfectly square. Orient frame so that the narrow side of the window is on top.
- 1.1.3 Enlarge holes in door and frame to $\varnothing 0.201"$ (#7 drill). Deburr.
- 1.1.4 Touch up frame with alodine 1200 per MIL-C-5541 after drilling and trimming.
- 1.1.5 Using Mylar or similar tape, carefully mask off an area of 0.43 inches (7/16) wide around the window opening of D3224-3 Frame (refer to Figure 2). Prime and paint frame to match aircraft finish per the Aircraft Maintenance Manual.
- 1.1.6 Apply Proseal 890 on the surface of the door where the D3224-3 Frame will be installed (see Section B-B). Fasten the D3224-3 Frame to the door using provided hardware.
- 1.1.7 Install D3136-043 Window Assembly, D3237-1-0980 Seal Retainer, and D3237-3-0980 Seal Filler per Section 1.2 of these instructions.

1.2 INSTALLATION OF PUSH OUT WINDOWS

Refering to Detail A and Figure 2, install the D3136-043 Window Assembly, D3237-1-0980 Seal Retainer, and D3237-3-0980 Seal Filler as follows:

- 1.2.1 Using Mylar or similar tape, carefully mask off the frame leaving an area 0.43 inches (7/16) wide to be bonded to avoid getting adhesive or primer onto surrounding areas that will be later primed and painted. Paint and primer will not adhere to surfaces where silicone and/or adhesive have been applied.
- 1.2.2 Remove all adhesive and/or finish from unmasked portion of window frame using stiff fiber brush and aliphatic naphtha. 360 grit abrasive paper may be used to remove any primer from the unmasked area of the window frame. Finish must be removed from the seal bonding area of the frame.
- 1.2.3 Inspect the edge of the frame for scratches, cracks, or other damage.
- 1.2.4 Clean all residue from the window frame with MEK (Methyl Ethyl Ketone) and dry with a clean white cloth.
- 1.2.5 Apply Dow 1200 primer to area to be bonded using a small brush. Allow primer to dry between 20 minutes and one hour before bonding window seal into place.
- 1.2.6 Prepare D3237-1-0980 Seal Retainer for bonding by abrading the narrow seal insert groove with 80-grit abrasive paper (see Figure 2).

(continued on Sheet 2)

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	
D. SHEPHERD (DE # 02)	
DATE:	09.05.06
CERT. NO.:	SH05-10
ISSUE NO.:	1

A	NEW ISSUE		MB	09.05.06	
REV.	DESCRIPTION		BY	DATE	
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	DRAWING NO. DSI 9462 TITLE WINDOW SUBSTITUTION	REV. A SHEET 1 OF 4 SCALE NTS	
DRAWN					
CHECKED					
MFG. APPR.	N/A				
APPROVED					
DE APPR.					
DATE	09.05.06	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

(continued from Sheet 1)

- 1.2.7 Clean all residue from the seal groove with a cloth dampened with MEK. Wipe dry with a clean cloth.
NOTE: Seal ends should meet at the 6 o'clock position. Seal insert ends should meet at the 12 o'clock position.
- 1.2.8 Apply 0.010 to 0.015 inches of RTV-732 sealant to both sides of the narrow seal insert groove (see Figure 2).
- 1.2.9 Apply 0.010 to 0.015 inches of RTV-732 sealant to areas of the window frame that have been prepared for bonding with Dow 1200 primer per 1.2.5.
NOTE: It is prohibited to bond lower corners as shown in Figure 2.
- 1.2.10 Do not put any adhesive in the seal groove that accepts the window. Note that the seal insert groove faces outward (see Figure 2).
- 1.2.11 Install D3237-1-0980 seal in the frame. Trim as required. Masking tape may be used temporarily to hold the seal in place for the next step.
- 1.2.12 Place the window in the seal groove and work seal lip around the periphery of the window.
- 1.2.13 Install D3237-3-0980 into D3237-1-0980 using D3561-1 Window Seal Tool (or equivalent). Trim seal as required. Work the seal insert around until it fits properly.
- 1.2.14 Remove all masking tape and allow sealant to cure for a minimum of 24 hours at 75°F (24°C).

2.0 PARTS LIST

Qty -011	Part No.	Description
X	DSI 9462-011	WINDOW SUBSTITUTION KIT
1	D3136-043	WINDOW ASSEMBLY
1	D3224-3	FRAME
1	D3237-1-0980	SEAL RETAINER
1	D3237-3-0980	SEAL FILLER
1	D3561-1	WINDOW SEAL TOOL
12	AN5261032R9	SCREW
12	AN960JD10L	WASHER
12	MS21042L3	NUT (OR MS21042-3)

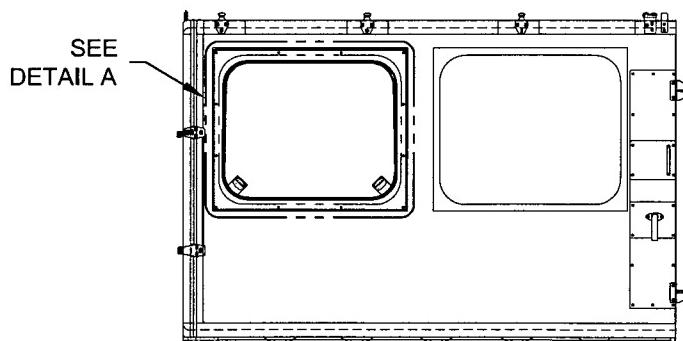


FIGURE 1: D412-694-01 DOOR ASSY (SHOWN)

D412-694-02 DOOR ASSY (OPPOSITE)

VIEW LOOKING OUTBOARD, NOT TO SCALE

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	
D. SHEPHERD (DE # 02)	
DATE:	09.05.06
CERT. NO.:	SH05-10
ISSUE NO.:	1

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9462	SHEET 2 OF 4
APPROVED		TITLE	SCALE
DE APPR.		WINDOW SUBSTITUTION	NTS
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APPLY A THIN LAYER
OF PROSEAL 890
BETWEEN FRAME AND
DOOR, TYP ALL AROUND

AN960JD10L WASHER
MS21042L3 NUT

D3224-3 FRAME
REF

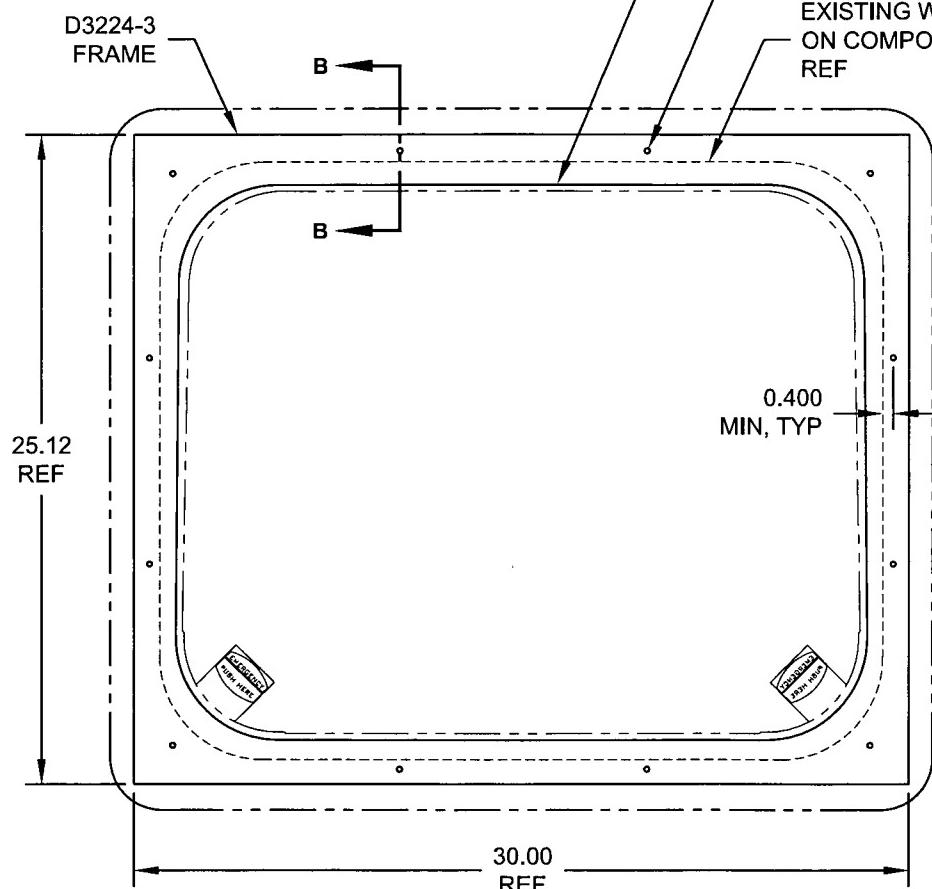
DOOR
REF

OUTBOARD
→

AN5261032R9
SCREW

SECTION B-B: FASTENER ARRANGEMENT

12 PL, NOT TO SCALE



DETAIL A: INSTALLATION OF D3224-3

VIEW LOOKING OUTBOARD, NOT TO SCALE

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	09.05.06
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MFG. APPR.	N/A	DSI 9462	SHEET 3 OF 4
APPROVED	<i>14</i>	TITLE	SCALE
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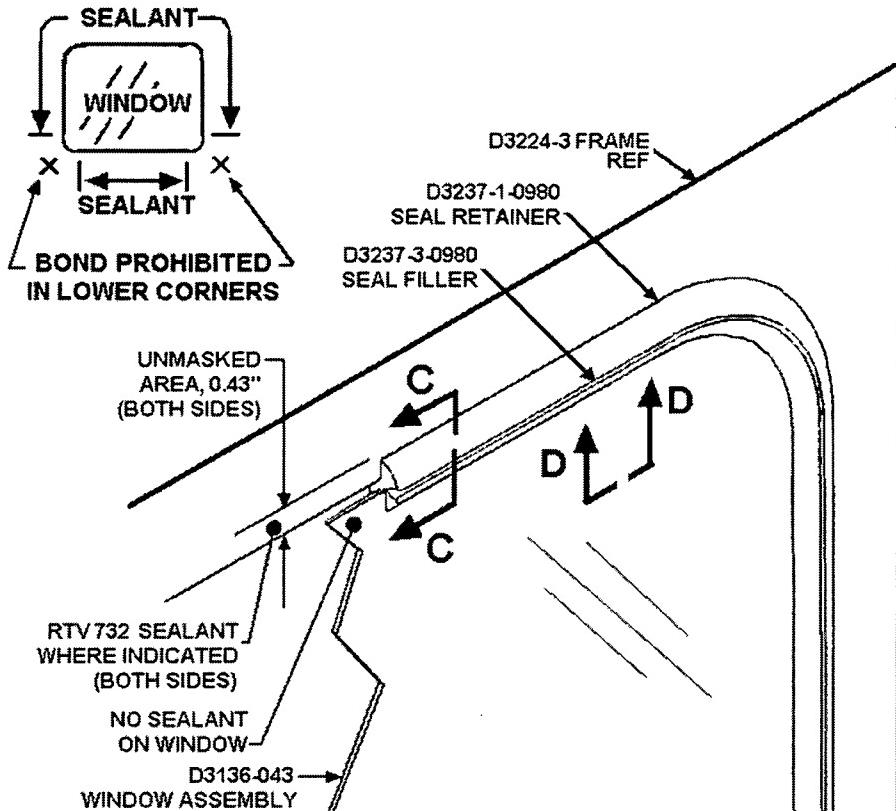
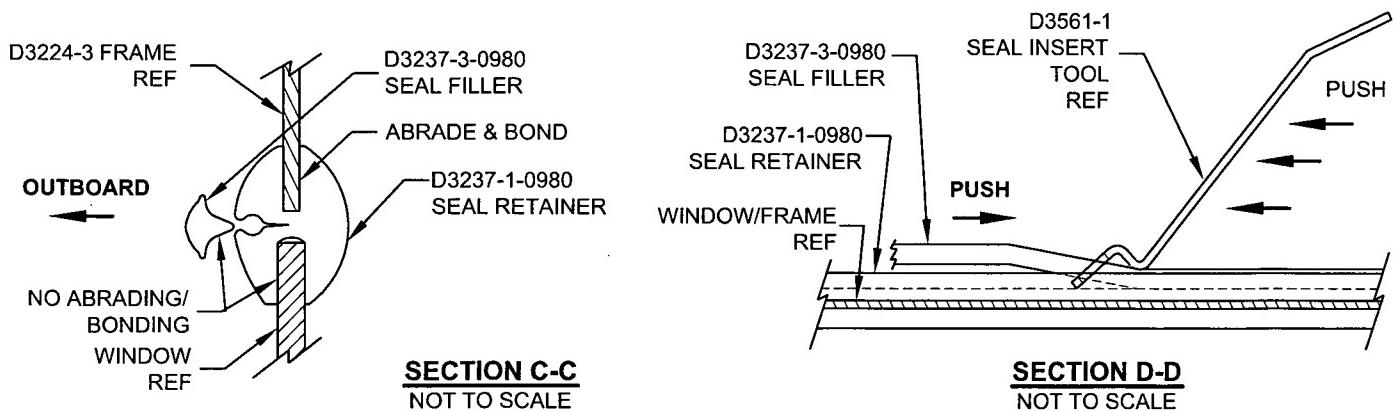


FIGURE 2: WINDOW/SEAL INSTALLATION



CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01	
APPROVED <i>[Signature]</i>	
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DATE:	09.05.06
CERT. NO.:	SH05-10
ISSUE NO.:	1

DESIGN	18	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	18	DRAWING NO. DSI 9462	
CHECKED	PH	REV. A SHEET 4 OF 4	
MFG. APPR.	N/A		
APPROVED	<i>[Signature]</i>	TITLE WINDOW SUBSTITUTION	
DE APPR.	<i>[Signature]</i>	SCALE NTS	
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